

REMARKS

The Office Action mailed September 8, 2004 has been carefully reviewed and the following remarks have been made in consequence thereof.

Claims 1-5, 7-9, 11-24, 26-28, 30, and 31 are pending in this application. Claims 1-11, 21-24, 26-28, 30, and 31 are rejected. Claims 6, 10, 25, and 29 have been canceled. Claims 12-20 are allowed.

The rejection of Claims 1 and 6-11 under 35 U.S.C. 103(a) as being unpatentable over Damm et al. (U.S. Pat. No. 6,457,564) in view of Sakai et al. (Jap. Pat. No. JP10170504A) is respectfully traversed.

Damm et al. describe a lubrication system for supplying a lubricant to one or more gear driven devices, whether or not the gear driven devices are in operation or not. Accordingly, Damm et al. describe an engine (2) that is coupled to a gear device (3). The engine includes a lubricant pump (6) that causes a lubricant (L) to flow from a lubricant sump (5) through an external lubricant line (7) that includes a filter (8). Damm et al. also describe that the gear device (3) includes a return line (23) including a filter (24) for filtering the lubricant before re-entering the engine. Notably, Damm et al. do not describe nor suggest a system for performing a clean check on a gearbox after final assembly wherein the filters are weighed to determine a weight of contaminant in the filter and determining whether the gear box is acceptable for use by comparing the contaminant weight to a predetermined level.

Sakai et al., to the extent understood, describe a measuring apparatus that quantitatively evaluates a contaminant that is dissolved in a refrigerant oil. In use, the system is evacuated and the refrigerant oil is poured into a sample container (11). A mixed solution of refrigerant and refrigerant oil is passed through a filter inside a filter holder (12). Based on the change in weight of the filter holder, or the filter inside the filter holder, the amount of contaminant precipitated in the mixed solution can be evaluated. Notably, Sakai et al. do not describe nor suggest performing a clean check on the system to determine cleanliness after

final assembly. Rather, Sakai et al. describe a measuring apparatus that quantitatively evaluates a contaminant dissolved in refrigerator oil of the apparatus, after the apparatus has been operated for an extended period of time.

Applicant respectfully disagrees with the assertion within the Office Action, at page 3, that Sakai et al. describe “comparing the contaminant weight to a predetermined level, wherein the gearbox is acceptable if the contaminant weight is below the predetermined level.” Rather, Sakai et al. merely describe that the amount of contaminant precipitated in a mixed solution can be evaluated based on the change in weight of the filter holder or the filter inside the filter holder. Sakai et al. therefore does not describe nor suggest determining whether a gearbox is acceptable for shipment after final assembly based on whether the contaminant weight is below the predetermined level, and does not describe nor suggest a filter-based system that is used during the assembly process to determine the cleanliness of the system. Rather, Sakai et al. describe that the contaminated filter weight is compared to a non-contaminated filter weight to determine the quantity of contaminants precipitated in the refrigerant oil.

Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Damm et al. nor Sakai, et al, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicant respectfully submits that it would not be obvious to one skilled in the art to combine Damm et al with Sakai et al, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicant’s own teaching. Rather, only the conclusory statement that “[i]t would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the oil quality determining method as disclosed by Damm et al. with the contaminants weight determining method as taught by Sakai et al. in order to

provide a more accurate and convenient way of measuring, as described in the Abstract of Sakai et al., so that the system is provided with longer life.”

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants’ disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant’s disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is clearly based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Moreover, if art “teaches away” from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited, as a whole, is not suggestive of the presently claimed invention. Moreover, Applicant submits that Damm et al. teach away from Sakai et al. and the present invention, and as such, there is no suggestion or motivation to combine Damm et al. with Sakai et al. Specifically, Damm et al. describe an engine coupled to a gear device that pumps oil through a filter on a lubricant line, and Sakai et al. describe an

apparatus that quantitatively evaluates a contaminant dissolved in a refrigerant oil. Accordingly, for at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejection be withdrawn.

Moreover, Applicant respectfully submits that “[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. In re King, 231 USPQ 136 (Fed. Cir. 1986). The examiner has not provided any basis in fact and/or technical reasoning that the systems or methods taught by Damm et al. or Sakai et al. include a step of “weighing a filter to determine the weight of contaminants collected in the filter, comparing the contaminant weight to a predetermined level, and wherein the gearbox is acceptable if the contaminant weight is below the predetermined level.” Further, the assertion in the office action that “determining the quality of the lubricant in the system (since it is inherent that filter is changed periodically)” mischaracterizes the claimed invention. Applicant respectfully submits that the recitation within Claim 1 recites “weighing a filter to determine the weight of contaminants collected in the filter” and is not analogous to determining the quality of the lubricant in the system as is asserted in the Office Action. For at least the reasons above, Applicant respectfully submits that Claim 1 is patentable over Damm et al. in view of Sakai et al.

Moreover, and to the extent understood, no combination of Damm et al., or Sakai et al. describe or suggest the claimed combination and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Independent Claim 1 recites a method of performing a clean check on a gearbox after final assembly, wherein the method includes “(a) filtering an oil-based fluid in a preliminary filter, (b) weighing a primary filter, (c) flushing aid oil-based fluid through said gearbox and then through said primary filter, (d) weighing said primary filter to determine the weight of contaminants collected in said primary filter, (e) comparing said contaminant weight to a predetermined level, wherein said gearbox is acceptable for use if said contaminant weight is below said

predetermined level, and (f) repeating steps (a)-(e) if said contaminant weight is above said predetermined level.”

No combination of Damm et al. or Sakai et al. describes or suggests the claimed combination. Specifically, Applicant respectfully submits that no combination of Damm et al. and Sakai et al. describes or suggests a system for performing a clean check on a gearbox after final assembly wherein the filters are weighed to determine a weight of contaminant in the filter and determining whether the gear box is acceptable for use by comparing the contaminant weight to a predetermined level. Rather, Damm et al. describe an engine coupled to a gear device that pumps oil through a filter on a lubricant line, and Sakai et al. describe an apparatus that quantitatively evaluates a contaminant dissolved in a refrigerant oil. Accordingly, and for at least the reasons set forth above, Claim 1 is submitted as patentable over Damm et al. in view of Sakai et al.

For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claim 1 be withdrawn.

Claim 6 has been canceled. Claims 7-9 and 11 depend from independent Claim 1. When the recitations of Claims 7-9 and 11 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 7-9 and 11 likewise are patentable over Damm et al. in view of Sakai et al.

For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 1, and 6-11 be withdrawn.

The rejection of Claims 2-5 under 35 U.S.C. 103(a) as being unpatentable over Damm et al. (U.S. Pat. No. 6,457,564) in view of Sakai et al. (Jap. Pat. No. JP10170504A) and further in view of Kodaira et al. (Jap. Pat. No. JP10170504A) is respectfully traversed.

Damm et al. and Sakai et al. are described above. Kodaira et al., to the extent understood, describe a method of determining a quantity of machining oil remaining on the surface of a metal product cleaned with a cleaner. The method includes inserting the metal

product into a cleaning tank containing a solvent, dissolving the machining oil using the solvent, extracting the mixture of cleaning oil and solvent through a filter, and measuring the quantity of cleaning oil using a concentration meter or an infrared spectrum analysis system. Notably, Damm et al. do not describe nor suggest a system for performing a clean check on a gearbox after final assembly wherein the filters are weighed to determine a weight of contaminant in the filter and determining whether the gear box is acceptable for use by comparing the contaminant weight to a predetermined level.

Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Damm et al., Sakai et al., nor Kodaira et al. considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicant respectfully submits that it would not be obvious to one skilled in the art to combine Damm et al, Sakai et al. and Kodaira et al., because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicant's own teaching. Rather, only the conclusory statement that "[i]t would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of performing a clean check on a gearbox of Damm et al. in view of Sakai et al. by adding the step of soaking a device in a solvent prior the step of measuring as taught by Kodaira et al. in order to provide a more accurate means of targeted measurement so that the cost involved in maintenance can be reduced."

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art,

and not based on Applicant's disclosure. In re Vaeck , 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is clearly based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Moreover, if art "teaches away" from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited, as a whole, is not suggestive of the presently claimed invention. Moreover, Applicant submits that Damm et al. teach away from Sakai et al. and Kodaira et al. and the present invention, and as such, there is no suggestion or motivation to combine Damm et al. with Sakai et al. and Kodaira et al. Specifically, Damm et al. describe an engine coupled to a gear device that pumps oil through a filter on a lubricant line, Sakai et al. describe an apparatus that quantitatively evaluates a contaminant dissolved in a refrigerant oil, and Kodaira et al. describe measuring the quantity of cleaning oil using a concentration meter or an infrared spectrum analysis system. Accordingly, for at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejection be withdrawn.

Moreover, and to the extent understood, no combination of Damm et al., or Sakai et al. describe or suggest the claimed combination and as such, the presently pending claims are

patentably distinguishable from the cited combination. Specifically, Independent Claim 1 recites a method of performing a clean check on a gearbox after final assembly, wherein the method includes “(a) filtering an oil-based fluid in a preliminary filter, (b) weighing a primary filter, (c) flushing aid oil-based fluid through said gearbox and then through said primary filter, (d) weighing said primary filter to determine the weight of contaminants collected in said primary filter, (e) comparing said contaminant weight to a predetermined level, wherein said gearbox is acceptable for use if said contaminant weight is below said predetermined level, and (f) repeating steps (a)-(e) if said contaminant weight is above said predetermined level.”

No combination of Damm et al., Sakai et al. or Kodaira et al. describes or suggests the claimed combination. Specifically, Applicant respectfully submits that no combination of Damm et al., Sakai et al. and Kodaira et al. describes or suggests a system for performing a clean check on a gearbox after final assembly wherein the filters are weighed to determine a weight of contaminant in the filter and determining whether the gear box is acceptable for use by comparing the contaminant weight to a predetermined level. Rather, Damm et al. describe an engine coupled to a gear device that pumps oil through a filter on a lubricant line, Sakai et al. describe an apparatus that quantitatively evaluates a contaminant dissolved in a refrigerant oil, and Kodaira et al. describe measuring the quantity of cleaning oil using a concentration meter or an infrared spectrum analysis system. Accordingly, and for at least the reasons set forth above, Claim 1 is submitted as patentable over Damm et al. and Sakai et al. in view of Kodaira et al.

For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claim 1 be withdrawn.

Claims 2-5 depend from independent Claim 1. When the recitations of Claims 2-5 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2-5 likewise are patentable over Damm et al. in view of Sakai et al. and further in view of Kodaira et al.

For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 2-5 be withdrawn.

The rejection of Claims 21-24, 26-28, 30, and 31 under 35 U.S.C. 103(a) as being unpatentable over Damm et al. (U.S. Pat. No. 6,457,564) in view of Logue (U.S. Pat. No. 3,566,892) is respectfully traversed.

Damm et al. is described above.

Logue describes cleaning an oil filter cleaner and an arrangement for cleansing the cleaner solvent. Filter 2 is supported on its base 3 and separate compartments 5, 6, and 7 and tubular member 8 is vertically disposed through compartments 5, 6, and 7. Filter 2 is positioned in operating area/compartments 7 and diffuser 23 has a series of apertures 24 along its length for discharge of solvent to filter 2. Supplemental filter 31, positioned between compartments 6 and 7, removes impurities entrained in the solvent, and solvent filters through supplemental filter 31 to compartment 6. Check valve 19 is positioned in hermetic wall 15, which itself is positioned between compartments 5 and 6. Check valve 19 allows solvent to drain from compartment 6 to compartment 5 upon termination of the cleaning operation.

Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Damm et al. nor Logue considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicant respectfully submits that it would not be obvious to one skilled in the art to combine Damm et al. and Logue, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicant's own teaching. Rather, only the conclusory statement that "[i]t would have been obvious to a person of ordinary skill in the art at the time

the invention was made to apply the filter soaking means as taught by Logue in the system as disclosed by Damm et al. in order to provide a device that reuses filters so that the cost of maintenance can be reduced.”

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants’ disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant’s disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is clearly based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Moreover, if art “teaches away” from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited, as a whole, is not suggestive of the presently claimed invention. Moreover, Applicant submits that Damm et al. teach away from Logue and the present invention, and as such, there is no suggestion or motivation to combine Damm et al. with Logue. Specifically, Damm et al. describe an engine coupled to a gear

device that pumps oil through a filter on a lubricant line and Logue describes a first filter positioned in a compartment for cleaning, and a second filter in a compartment to filter the solvent used for cleaning the first filter. Accordingly, for at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejection be withdrawn.

Moreover, and to the extent understood, no combination of Damm et al. or Logue describe or suggest the claimed combination and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Independent Claim 21 recites a system for performing a clean check on a gearbox having an inlet and an outlet, wherein the system includes “a source of an oil-based fluid fluidly connected to said gearbox inlet...a first filter fluidly connected to said gearbox outlet...a preliminary filter fluidly connected between said source of an oil-based fluid and said gearbox inlet...means for causing said oil-based fluid to flow through said gearbox, said preliminary filter, and said first filter... means for soaking said first filter in a solvent... means for determining the weight of contaminants filtered in said first filter during said check run, and means to compare the weight of contaminants filtered against a predetermined level to determine if said gearbox is adequately clean for use after final assembly.”

No combination of Damm et al. or Logue describe or suggest the claimed combination. Specifically, Applicant respectfully submits that no combination of Damm et al. or Logue describes or suggests a system for performing a clean check on a gearbox after final assembly wherein the filters are weighed to determine a weight of contaminant in the filter and determining whether the gear box is acceptable for use by comparing the contaminant weight to a predetermined level. Rather, Damm et al. describe an engine coupled to a gear device that pumps oil through a filter on a lubricant line and Logue describes a first filter positioned in a compartment for cleaning, and a second filter in a compartment to filter the solvent used for cleaning the first filter. Accordingly, and for at least the reasons set forth above, Claim 21 is submitted as patentable over Damm et al. in view of Logue.

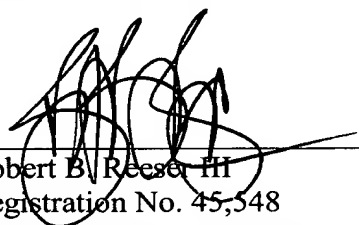
For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claim 21 be withdrawn.

Claims 22-24, 26-28, 30 and 31 depend from independent Claim 21. When the recitations of Claims 22-24, 26-28, 30 and 31 are considered in combination with the recitations of Claim 21, Applicant submits that dependent Claims 22-24, 26-28, 30 and 31 likewise are patentable over Damm et al. in view of Logue.

For the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 22-24, 26-28, 30 and 31 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Robert B. Reese III", is written over a horizontal line.

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